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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,353	02/10/2004	Phillip Frederick	10557/293163	1160
30559	7590	10/20/2006		
CHIEF PATENT COUNSEL SMITH & NEPHEW, INC. 1450 BROOKS ROAD MEMPHIS, TN 38116			EXAMINER SWIGER III, JAMES L	
			ART UNIT 3733	PAPER NUMBER

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/775,353	<b>Applicant(s)</b> FREDERICK ET AL.	
	<b>Examiner</b> James L. Swiger	<b>Art Unit</b> 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 8/3/2006 have been fully considered but they are not persuasive.

With regards to the arguments regarding the "clarification in the amendment" it is still held that in the cited reference of Frieze, the "second portion" also provides a surface as required by the claim. A surface would be any outward portion not facing inward. In the case of the Frieze et al. reference, the side "portion" also creates a surface because it faces outward as noted in the Action drawings as the triangular section.

Lechot is also considered to have a section portion and at least a second surface (regarding 50), for the same reasons as Frieze et al. because this the sides would create at least a second surface facing outwardly. Lechot is also a *hollow* reamer, disclosed in paragraph 0020 as a "bowl or shell defining a surface" suggesting a *generally* dome shape. Also with regards to what is considered a sector and as mentioned in the previous action, a sector could be grouped or formed in any number of ways (some with and some without raised edges) that would be capable of at least occupying less than half the area of the surface of the reamer, meeting the claim limitation. Not every sector would be required to have a tooth therefore, making it different than even a sector including a raised edge.

And finally, it is still held that the Salyer reference teaches cutting edges that are confined to a band straddling the middle portion of the dome shape (see again Fig. 2).

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For at least the reasons above, the following rejections still apply:

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

### ***Claim Objections***

There was a duplicate claim 13 listed in the claims. Only 1 of the claim 13 was properly cancelled. The other claim 13 must be cancelled as well, as it was not examined on the merits per the election/restriction requirement in the office action dated 3/10/2006.

Appropriate action is required.

### ***Claim Rejections - 35 USC § 102***

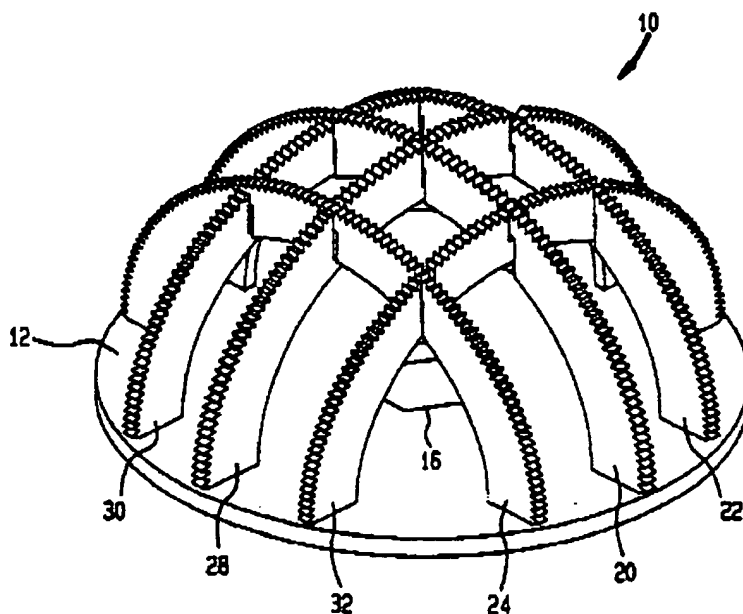
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Frieze et al. (US 5,775,719). Frieze et al. disclose a reamer having a hollow body

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having a general dome shape (10) forming an inner and outer surface, and is capable of rotating on an axis (16). The device also has a plurality of raised edges for cutting bone (42) or cartilage, and a plurality of openings for the passing the fragments into the interior portion of the reamer (see drawing below). Also shown below is the reamer disclosed by Frieze et al. having a first portion dimensioned as a surface of rotation, and a second portion not forming a surface of rotation that is generally located closer to the axis of rotation than the first portion. For clarification, the triangular sections represent a portion of the reamer head that may be considered a second portion, separate from the shown first "banded" and rotational portion. These two portions are closer to the location of the axis of rotation (16), than from the extents of the first portion as a rotational surface. Though difficult to show, the two triangles are in planes substantially parallel.

**FIG. 1**

Further, with regards to claim 8, the device of Frieze et al. is capable of use in surgery for either hip replacement or in the acetabulum of an animal or a human.

Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Lechot (US 2005/0075639). Lechot discloses a device having a hollow body with a surface (12'), a dome shape (fig. 4), a plurality of raised edges for cutting bone or cartilage (fig. 4), and has a plurality of openings for passing fragments of bone into the interior of the reamer (18'). Lechot further discloses a reamer that has a first portion (12') and that also has a second portion (50) that does not form a surface of rotation and is closer to the axis of rotation (since these cut edges form a shortened outer rim of the reamer, closer to the axis). See also Par. 0033. The two second portions are substantially parallel, and the raised cutting edges are also confined to the first portion (fig. 4). The device as disclosed is also capable of use in hip replacement arthroplasty or for use in the acetabulum of an animal or human. Also in the device of Lechot, the raised edges may be considered in multiple sectors, divided transversely across the first portion, or horizontally across its diameter, as individual or multiple cutting edges.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lechot '639 in view of Salyer (US 5,116,165). Lechot discloses the claimed invention except for the cutting edges being confined to a band in the middle portion of the dome shape (e.g. the first portion). Salyer discloses a reamer that has cutting edges placed on the cutting surface in a band-like formation, wherein each cutting surface overlaps the previous one in a particular cutting direction, considered form and function as a band of cutting edges (Fig. 2; Col. 3, lines 30-44; Col. 4, lines 19-24). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Lechot having raised edges in a band formation in the center of the domed surface in view of Salyer to more effectively cut the bone or cartilage in use of the device.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

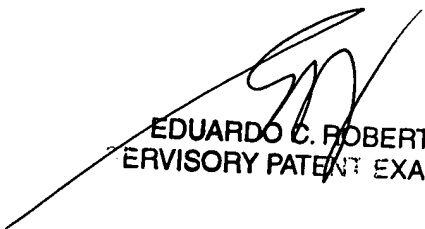
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James L. Swiger whose telephone number is 571-272-5557. The examiner can normally be reached on Monday through Friday, 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
JLS

10/11/06

  
EDUARDO C. ROBERT  
SUPERVISORY PATENT EXAMINER